

IN THE CLAIMS

1. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages between first and second data switches over a pre-established alternate data path linking said first and second data ~~switches comprised of the steps of~~ switches, the method comprising:

    sending at least a first data message over a first data path from said first data switch to said second data switch;

    receiving at said first data switch one or more switch status messages from said second data switch;

    inhibiting generation of a switch status message at said first data switch destined for ~~another~~ a third data switch in the first data path ~~different from the second switch~~ upon not receiving said one or more switch status messages from said second data switch at said first data switch to initiate redirection of subsequent data messages over an alternate data path through said data network.

2. (Original) The data network of claim 1 wherein said alternate data path is a protection path through said network.

3. (Original) The method of claim 1 wherein said data switches are asynchronous transfer mode switches.

4. (Original) The method of claim 1 wherein said data switches are internet protocol (IP) routers.

5. (Original) The method of claim 1 wherein said switch status messages are comprised of a predetermined format, switch liveness message.

6. (Currently Amended) The method of claim 1 wherein at least one of said data switches maintains a table of incoming link and path identifiers and of outgoing link and path identifiers.

7. (Currently Amended) The method of ~~claim 1~~ claim 1 wherein said first data message represents speech information.

8. (Original) The method of claim 1 wherein said first data messages represents computer data.

9. (Currently Amended) The method of claim 1 further comprising:

sending subsequent data messages ~~to a~~ to the third data switch.

10. (Original) The method of claim 1 wherein said first data switch is a protection switch element.

11. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages around a data switch ~~comprised of the steps of~~ comprising:

receiving at least a first data message over a first data path sent from a first data switch to a second data switch;

sending said first data message from said second data switch to a third data switch;

receiving at said second data switch one or more switch status messages indicating the functionality of said third data switch;

inhibiting generation of a switch status message destined for said first data switch at said second data switch upon not receiving said switch status messages at said second data switch from said third data switch,

wherein inhibiting generation of a switch status message destined for said first data switch at said second data switch initiates redirection of subsequent data messages away from said second and third data switches via a second data path through said data network.

12. (Original) The data network of claim 11 wherein said second data path is a protection path through said network.

13. (Original) The method of claim 11 wherein said data switches are asynchronous transfer mode switches.

14. (Original) The method of claim 11 wherein said data switches are internet protocol (IP) routers.

15. (Original) The method of claim 11 wherein said data switches are digital cross connect switches controlled by MPLS.

16. (Original) The method of claim 11 wherein said data switches are optical cross connects and switches controlled by MPLS.

17. (Original) The method of claim 11 wherein said switch status messages are comprised of a predetermined format, switch liveness message.

18. (Currently Amended) The method of claim 11 wherein at least one of said data switches maintains a table of incoming link and path identifiers and of outgoing link and path identifiers.

19. (Previously Presented) The method of claim 11 wherein said data messages represent speech information.

20. (Previously Presented) The method of claim 11 wherein said data messages represent computer data.

21. (Previously Presented) The method of claim 11 further comprising:

    sending subsequent data messages to a fourth data switch.

22. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages between first and second data switches over a pre-established alternate data path linking said first and second data ~~switches comprised of the steps of~~ switches, the method comprising:

sending at least a first data message over a first data path from said first data switch to said second data switch;

sending a switch status message to said first data switch in response to not receiving said first data message from said first data switch, said switch status message operable to initiate redirection of subsequent data messages over an alternate data path through said data network.

23. (Currently Amended) In a data network comprised of a plurality of data switches interconnected to form a plurality of data paths forming a mesh configuration of data switches, a method of re-routing data messages around a data switch ~~comprised of the steps of~~ comprising:

sending at least a first data message over a first data path from a first data switch to a second data switch;

sending said at least a first data message from said second data switch to a third data switch;

sending a switch status message to at least one of said first and second data switches in response to not receiving said first data message from said first data switch, said switch status message initiating redirection of subsequent data messages away from said second and third data ~~switch~~ switches via another data path through said data network.

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24. (Currently Amended) The method of claim 23 wherein said first data switch is a protection switch element.